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EXAMINER				
BURCH, MELODY M				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/595,330

**Applicant(s)**

MAAS, PATRICK J.

**Examiner**

MELODY BURCH

**Art Unit**

3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 5) ☒ Claim(s) 1-14 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1-14 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 10 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-SB03)  
Paper No(s)/Mail Date \_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of a helper spring 70 recited in claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Examiner notes that reference character "70" is not shown in figure 5 as described in the instant specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. **Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d).** If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. **The marked-up copy must be clearly labeled as “Annotated Sheets”** and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d)(1). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4, 8, 9, 12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5269497 to Barth in view of US Patent 3248745 to Gunlock and US Patent 6158815 to Sugie et al.

Re: claims 1, 2, 4, 8, 9, 12, and 14. Barth shows in figures 1 and 2 a seat spring assembly comprising: a frame 10,12 having a first and a second frame end with first and second sides connected to first and second transverse frame ends as shown; a plurality of flat leaf springs 18 having leaf spring first ends connected to the first frame end and leaf spring second ends connected to the second frame end; each leaf spring having one V arch adjacent the leaf spring first end and one shaped arch adjacent the leaf

spring second end; each leaf spring has a substantially flat center portion 32 extending longitudinally and aligned horizontally to define a seating support surface.

Barth is silent with regards to the shaped arch adjacent the second end of the leaf spring being a W arch.

Gunlock teaches in col. 2 lines 22-25 a seat spring assembly wherein each spring has a V arch adjacent a first end of the spring and a W arch adjacent a second end of the spring.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the arch at the opposite end of the leaf spring of Barth to have been a W, as taught by Gunlock, in order to provide a means of achieving a desired vertical deflection of the spring depending on the particular application.

Barth, as modified, is silent with regards to a cross piece and a plurality of coil springs as recited.

Sugie et al. teach in figure 8 the use of a seat spring assembly including a cross piece 24, the cross piece spanning and substantially perpendicularly interconnecting second ends of springs 22, the leaf spring second ends being attached to the cross piece, and a plurality of coil springs, the coil springs connecting the cross piece to a frame end 20 to transmit loads from the interconnected springs through the coil springs to the second frame end.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the spring assembly of Barth, as modified, to have

included a cross piece as recited and a plurality of coil springs as recited, as taught by Sugie et al., in order to provide added resilience and support to accommodate the seat spring assembly user. As best understood with regards to claim 12, Barth, as modified, shows substantially parallel top and bottom surfaces and side edges to the same extent as Applicant's invention. See 112 rejections above.

Re: claim 4. Alternately, in *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration is significant.

5. Claims 2-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5269497 to Barth in view of Gunlock and Sugie et al. and further in view of US Patent 2818105 to Herider et al.

Re: claims 2-4, 7-11, and 13. Barth, as modified, as set forth in the rejection above of claim 1 is silent with regards to the helper spring.

Herider et al. teach in figure 2 the use of a helper spring 58.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the configuration of the leaf springs of Barth, as modified, to have included a helper spring, as taught by Herider et al., in order to provide a means of reinforcing the support for the seat. With regards to claim 7, Herider et al. teach the use of the mounting plates 22. It would have been obvious to one of ordinary skill in the art to have modified the assembly of Barth, as modified, to have

included mounting plates, as taught by Herider et al., in order to connect the frame to the remaining portion of the seat.

Re: claim 5. Barth, as modified, teaches in figures 1 and 2 the limitation wherein there are 4 leaf springs for each seating, but is silent with regards to the dropped center position formed in the frame.

Herider et al. teach in figure 2 the frame including the dropped center position as shown.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the frame of Barth, as modified, to have modified the seat assembly of Barth, as modified, to have included a drop center position, as taught by Herider et al., in order to provide adequate space to resiliently accommodate a user for added comfort.

Re: claim 6. Barth, as modified, is silent with regards to the frame being U-shaped.

Herider et al. teach in figure 1 the use of what appears to be U-shaped frame.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the frame of Barth, as modified, to have been U-shaped, as taught by Herider et al., in order to provide a means of accommodating a particular seat shape. In *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966) the court held that the configuration of a claimed object was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration was significant.

***Response to Arguments***

6. Applicant's arguments filed 10/14/11 have been fully considered but they are not persuasive.

With respect to the drawings, Applicant has failed to label the sheets as a "Replacement Sheet" or an "Annotated Sheet" as required in the drawing objection section above. Therefore, the drawing objections have been maintained.

The claim objections and 112 second rejections have been withdrawn in light of the current amendment.

With regards to the art rejections, Applicant again argues that the V and W shapes of Gunlock are arranged in a different manner from those in the instant invention and from the V shapes in the Barth reference.

In response to applicant's argument that the V and W shapes of Gunlock are arranged differently, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Gunlock teaches the use of a seat spring including a spring portion having a V shaped portion or arch on the front and a W shaped portion or arch on the rear. Combining the teaching of Gunlock with the Barth reference (which includes a seat spring including a spring portion having a V shaped arch on the front and rear sides) would result in the Barth reference having a V shaped arch on the front



and a W shaped arch on the rear. Examiner insists that there is suggestion or motivation to make the proposed modification since the V shaped regions of the spring portion of Barth are described as being used as support for the seat cushion (see lines 7-8 of the Barth abstract) while the V and W shaped regions of the spring portion of Gunlock are also described as being used as supporting portions in the seat spring assembly (see col. 2 lines 23-24 of Gunlock). Modifying the shaped regions of the spring portions of Barth would result in a modification of the level of support for the seat which may be altered to best suit a particular application.

Next, in the discussion of the Gunlock reference Applicant appears to try to make a distinction between the words "shape" and "arch" on pg. 11 of the remarks, but Examiner maintains that an arch is a shape. In other words, something that has a V shape forms a V arch. Similarly, something that has a W shape forms a W arch. Examiner is, therefore, unclear as to why Applicant has chosen to highlight the words "shapes" and "arch". Applicant also argues that Gunlock does not teach a leaf spring and that the V and W portions react only in compression. Examiner reiterates that she is not relying on Gunlock for the teaching of a leaf spring or a particular spring reaction. Such limitations are already satisfied by the base reference, Barth. Gunlock is relied upon solely for the teaching of a seat spring having a spring portion including both a V-shaped portion or arch and a W-shaped portion or arch. A similar argument holds true for the use of the Sugie reference. Contrary to Applicant's suggestion, Sugie is used solely for the teaching of a crosspiece and a plurality of coil springs which provide an alternate way of supporting the seat assembly with respect to a surrounding frame.

Whether or not Sugie has leaf springs is irrelevant since the base reference satisfies the limitation regarding the spring type.

On pg. 14 of the remarks, Applicant argues that the Examiner failed to show or provide reason that Barth in view of Gunlock and Sugie teaches the "V arch being oriented on a first vertical axis so that it opens upwardly and said W arch being formed in two segments, each segment being oriented on a second and third vertical axis so that said W arch opens upwardly." Taking a closer look at the disclosure of Barth, Examiner notes that in lines 4-9 of the abstract Barth explains that in one embodiment each spring member 18 has one or more V-shaped arch near the front and rear frame members. Such a description includes an arrangement in which there is one V-shaped arch near the front and two adjacent V-shaped arches (which forms a W shape) near the rear. The one V-shaped arch near the front would be oriented on the first vertical axis, the two adjacent V-shaped arches near the rear would be oriented on second and third vertical axes, respectively. The V shapes are clearly shown in figures 1 and 2 of Barth to be open upwardly.

Applicant argues that secondary reference Herider does not teach a leaf spring. Again, Herider is not used to teach a leaf spring because such a teaching is satisfied by the base reference. Herider was used solely for the teaching of the use of a helper spring. The discussion of the helper spring of Herider being "fixed at a non-existent location in the spring assembly of the present application [sic]" is an improper argument since the 103 rejection involves the combined teachings of the *references* and not the

combination of the secondary references with the instant invention as Applicant suggests.

Finally, Applicant argues that Examiner failed to properly reply to the affidavit filed on June 22, 2011. Examiner reiterates that the affidavit was noted and considered by the Examiner. Examiner has determined that what Applicant has submitted as evidence of commercial success in the affidavit is not sufficient to overcome the obviousness rejections. Particularly, Examiner maintains that the fact that the "springs...are found in ninety percent of Applicant's furniture products" does not constitute hard evidence of commercial success as it does not clearly link the commercial success to the claimed features.

Accordingly, the rejections have been maintained.

#### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 571-272-7114. The examiner can normally be reached on Monday-Friday (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mmb  
December 22, 2011

/Melody M. Burch/  
Primary Examiner, Art Unit 3657

